

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for determining the presence of antibodies to HIV in a body fluid, comprising:

(a) providing a body fluid;

(b) contacting, under conditions which permit immunospecific binding to form a reaction mixture, the body fluid with a composition containing at least one polypeptide consisting essentially of no more than 60 amino acid residues in length and having one of the following polypeptide sequences:

(II) BRU124EX (SEQ ID NO: 2)

W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-
Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-
Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(III) BRU124F1X (SEQ ID NO: 3)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-
Ile-Lys-Y-Z

(IV) BRU124F3X (SEQ ID NO: 4)

W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z

(V) ROD 124E1 (SEQ ID NO: 5)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX (SEQ ID NO: 6)

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-
Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-
Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-
Gly-Ala-Y-Z

(VII) ROD 124C2X (SEQ ID NO: 7)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-
Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X (SEQ ID NO: 8)

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-
Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X (SEQ ID NO: 9)

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-
Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-
Ile-Lys-Y-Z

(X) POL2A1 (SEQ ID NO: 10)

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-
Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Ile-
Ile-Pro-Arg-Arg-Lys-Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X (SEQ ID NO: 11)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH₂ group of the polypeptide or an additional amino acid bonded to the amino terminal NH₂ group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH₂; and

(b) (c) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which the detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

2. (Original) The method according to claim 1 in which the polypeptide is conjugated to a carrier macromolecule.

3. (Original) The method according to claim 1 in which the polypeptide is immobilized.

4. (Original) The method according to claim 1 in which the immunospecific binding is detected by immunoprecipitation.

5. (Original) The method according to claim 1 in which the composition includes at least one polypeptide selected from a polymerase protein of HIV-1 and one selected from a polymerase protein of HIV-2.

6. (Currently amended) The method according to claim 1 in which the polypeptide is modified by the substitution[[,]] or addition ~~or deletion~~ of amino acid residues so that the modified polypeptide retains substantially all of the immunological reactivity of the unmodified polypeptide.

7. (Original) The method of claim 6 in which the immunological reactivity is measured by a method selected from the group consisting of radioimmunoprecipitation, immunofluorescence, and enzyme-linked immunosorbant assay.

8. (Original) The method according to claim 1 in which immunospecific binding between the polypeptide or protein and the antibody component of the body fluid is detected by:

- (i) removing unbound components from immune complexes formed in the immunoreaction mixture;
- (ii) adding a labeled antibody to the immunoreaction mixture, the labeled antibody being capable of immunospecifically binding to a component of the immune complexes and the label providing a detectable signal; and
- (iii) determining whether the labeled antibody binds to the immune complexes.

9. (Original) The method according to claim 8 in which the label comprises an enzyme which is detected by the addition of the enzyme substrate.

10. (Original) The method according to claim 8 in which the label comprises a radiolabel.

11. (Original) The method according to claim 8 in which the label comprises a fluorescent label.

12. (Currently amended) A method for determining the presence of antibodies to HIV-1 in a body fluid, comprising:

(a) providing a body fluid;

(b) contacting, under conditions which permit immunospecific binding to form a reaction mixture, the body fluid with a composition containing at least one polypeptide consisting essentially of no more than 60 amino acid residues in length and having one of the following polypeptide sequences:

(II) BRU124EX (SEQ ID NO: 2)

W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-
Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-
Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(III) BRU124FX1 (SEQ ID NO: 3)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-
Ile-Lys-Y-Z

(IV) BRU124F3X (SEQ ID NO: 4)

W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z

wherein W is either a H of the amino terminal NH₂ group of the polypeptide or an additional amino acid bonded to the amino terminal NH₂ group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH₂; and

(b) (c) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which the detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

13. (Withdrawn) A method for determining the presence of antibodies to HIV-2 in a body fluid, comprising:

(a) contacting, under conditions which permit immunospecific binding to form a reaction mixture, the body fluid with a composition containing at least one polypeptide

consisting essentially of at least six amino acids which come within at least one of the following polypeptide sequences and including epitopes within such sequence:

(V) ROD 124E1 (SEQ ID NO: 5)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX (SEQ ID NO: 6)

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-Asp-Phe-
Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VII) ROD 124C2X (SEQ ID NO: 7)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-
Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X (SEQ ID NO: 8)

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-
Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X (SEQ ID NO: 9)

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-
Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-
Ile-Lys-Y-Z

(X) POL2A1 (SEQ ID NO: 10)

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-
Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Ile-
Ile-Pro-Arg-Arg-Lys-Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X (SEQ ID NO: 11)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH₂ group of the polypeptide or an additional amino acid bonded to the amino terminal NH₂ group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH₂; and

(b) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

14. (Withdrawn) A polypeptide composition, immunoreactive to antibodies to HIV, consisting essentially of at least one of the following amino acid sequences:

(I) BRU124E (SEQ ID NO: 1)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Y-Z

(II) BRU124EX (SEQ ID NO: 2)

W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-
Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-
Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(III) BRU124F1X (SEQ ID NO: 3)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-
Ile-Lys-Y-Z

(IV) BRU124F3X (SEQ ID NO: 4)

W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z

(V) ROD 124E1 (SEQ ID NO: 5)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX (SEQ ID NO: 6)

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-Asp-Phe-
Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VII) ROD 124C2X (SEQ ID NO: 7)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-
Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X (SEQ ID NO: 8)

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-
Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X (SEQ ID NO: 9)

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-
Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-
Ile-Lys-Y-Z

(X) POL2A1 (SEQ ID NO: 10)

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-
Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Ile-
Ile-Pro-Arg-Arg-Lys-Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X (SEQ ID NO: 11)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH₂ group of the polypeptide or an additional amino acid bonded to the amino terminal NH₂ group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH₂ and wherein amino acids in the sequence may be inserted, deleted and substituted so long as immunoreactivity to antibodies to HIV is retained.

15. (Canceled)
16. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (II) BRU24EX (SEQ ID NO: 2)
17. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (III) BRU124F1X (SEQ ID NO: 3).
18. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (IV) BRU124F3X (SEQ ID NO: 4).
19. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (V) ROD124E1 (SEQ ID NO: 5).
20. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (VI) ROD124EX (SEQ ID NO: 6).
21. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (VII) ROD124C2X (SEQ ID NO: 7).

22. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (VIII) ROD124C1X (SEQ ID NO: 8).

23. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (IX) ROD123C3X (SEQ ID NO: 9).

24. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (X) POL2A1 (SEQ ID NO: 10).

25. (Withdrawn) The polypeptide combination of claim 14, wherein said polypeptide has formula (XI) ROD124C5X (SEQ ID NO: 11).

26. (Withdrawn) A method for determining the presence of antibodies to HIV in a body fluid, comprising:

(a) contacting, under conditions which permit immunospecific binding to form a reaction mixture, the body fluid with a composition containing a combination of HIV-1 and HIV-2 envelope and polymerase polypeptides, said combination comprising

- (i) at least one HIV-1 envelope polypeptide;
- (ii) at least one HIV-2 envelope polypeptide;
- (iii) at least one HIV-1 polymerase polypeptide having a polypeptide sequence selected from the group consisting of:

(II) BRU124EX (SEQ ID NO: 2)

W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-
Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-
Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(III) BRU124F1X (SEQ ID NO: 3)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-
Ile-Lys-Y-Z

(IV) BRU124F3X (SEQ ID NO: 4)

W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z

and

(iv) at least one HIV-2 polymerase polypeptide having a polypeptide
sequence selected from the group consisting of:

(V) ROD 124E1 (SEQ ID NO: 5)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX (SEQ ID NO: 6)

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-Asp-Phe-
Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VII) ROD 124C2X (SEQ ID NO: 7)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-
Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X (SEQ ID NO: 8)

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-
Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X (SEQ ID NO: 9)

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-
Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-
Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-
Ile-Lys-Y-Z

(X) POL2A1 (SEQ ID NO: 10)

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-
Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Ile-
Ile-Pro-Arg-Arg-Lys-Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X (SEQ ID NO: 11)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH₂ group of the polypeptide or an additional amino acid bonded to the amino terminal NH₂ group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH₂; and

(b) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which the detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

27. (Withdrawn) The method of claim 26, wherein the HIV-1 polymerase polypeptide has the formula (IV) BRU124F3X (SEQ ID NO: 4) and the HIV-2 polymerase polypeptide has the formula (XI) ROD124C5X (SEQ ID NO: 11).

28. (Withdrawn) The method of claim 27, wherein the HIV-1 envelope polypeptide is the peptide designated as MNGC and the HIV-2 envelope polypeptide is the peptide designated as 41-2-3GC.